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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,274	11/14/2003	Huang Chen-Lung		4576

7590 03/18/2004
Huang Chen Lung
P.O. Box 2-10
Tainan City,
TAIWAN

EXAMINER

CAMPBELL, THOR S

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,274

Applicant(s)

CHEN-LUNG ET AL.

Examiner

Thor S. Campbell

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The originally filed specification appears to be a literal translation from a foreign document. The examiner is unable to determine with certainty what is disclosed and claimed by the applicant. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter. It is noted that the following action is based on the examiner's best understanding of applicant's disclosure and claims as presently presented.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *the water tank on the heating plate, the sensing electrode provided under the heating plate, the water level sensor and temperature fuse provided under the heating plate*, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. It is noted that claims 3 and 5 depend on claim 1 and therefore include all the limitations of that claim, in particular the water level probe fixed in a vertical hole of the heating plate, as such a drawing must show the limitations of claim 1 and claims 3 and 5 as a single embodiment as they are currently claimed rather than separate distinct embodiments as currently shown in the figures.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

Claims 1-10 are allowable.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art is replete with teachings of hot plate heaters having means to prevent dry-boiling or a no-water heating, including placing sensors in contact with a tank of water placed on the heater to sense the temperature, rate of change of temperature, even the presence of and size of a cooking vessel. Although the prior art separately teaches all the limitations of the independent claim, the prior art, does not teach to one of ordinary skill in the art, in combination with the other limitations of the independent claim, a hot plate heater arrangement wherein a water level probe is fixed in a hole in the heater plate for determining the water level in a tank placed on the heating plate and subsequently controlling the supply of power to the heating element based on the sensed water level. It is noted that the examiner understands the applicant's disclosure as providing a water level probe that "senses" the electric potential of the tank of water placed on the heating plate (see page 5, lines 21-23) as the means to "directly detect the water level in a water tank" (page 2, line 25 carryover).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Braun et al (US 4714822) discloses a hotplate having a vertical hole therethrough for providing a temperature sensor to control the heating element based on the temperature of the base of the pan placed on the hotplate, but does not show a water level probe for detecting the water level. Schotten et al. (US 6259069) discloses a heating plate for heating a tank of water or the like including a heating element which can be used as a capacitance sensor to sense the size of the load placed on the heating plate. Schotten does not explicitly discuss sensing the water level in the tank. Miquelot (US 5294779) discloses a heating plate having a hole in the middle for positioning a temperature probe to sense the temperature of the vessel being heated as well as a thermal fuse as a safety precaution against overheating. Berkcan et al. (US 6462316) discloses a ceramic hotplate with means to prevent boil dry conditions including a sensor for the direct detection of, or inferential detection of, temperature of the vessel. Berkcan does not explicitly discuss the detection of water level in the vessel being heated, but does disclose a boil-dry condition being sensed.

This application is in condition for allowance except for the following formal matters:

Drawing objections and substitute specification requirement as discussed above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thor S. Campbell whose telephone number is 703-306-9042. The examiner can normally be reached on Tue-Fri 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Pothier can be reached on 703-308-0265. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TSC
3/16/04



THOR CAMPBELL
PATENT EXAMINER